

*MULTI-THREAD, MULTI-SPEED, MULTI-MODE INTERCONNECT  
PROTOCOL CONTROLLER*

ABSTRACT

The present invention is a novel system and method for implementing multiple protocol definitions including multiple interconnect protocols and protocol methods. Protocol methods may include a single-thread, multi-speed  
5 interconnect protocol method and a multi-thread, single-speed interconnect protocol method with shared resources on a single die. Various aspects of serializer/deserializer, encoder/decoder, aggregator, and protocol functions may be shared among both protocol definitions to provide cost and real estate  
10 efficiency.